Main Street Bridge
Main Street (East), spanning the
Genesee River
Rochester
Monroe County
New York

HAER No. NY-175

HAER NY, 28-ROCH, 43-

PHOTOGRAPHS
WRITTEN HISTORICAL DATA

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HISTORIC AMERICAN ENGINEERING RECORD

MAIN STREET BRIDGE HAER NO. NY-175

Location:

Main Street (East) spanning the Genesee River in the City of

Rochester, Monroe County, New York.

UTM: N 4781250 E 287730

New York State Quad: Rochester East

Date of

Construction:

September 1855 to August 1857.

Present Owner:

City of Rochester.

Present Use:

Vehicular and Pedestrian Traffic.

Significance:

The present Main Street Bridge is the fourth bridge to occupy this site since 1812. Main Street is and has been throughout its history the primary commercial and business thoroughfare for the City of Rochester, thus this bridge has provided a crucial link in communication and transportation between both sides of the Genesee River. Beginning with the second river crossing of 1824, a phenomenon occurred which was rare in the United States: buildings were gradually built over the river and connected to the bridge. This relationship between bridge and buildings continued with subsequent crossings. The buildings erected alongside the current Main Street bridge were demolished in the mid-1960's. Incorporated into crowns of four of the five stone arches are cast iron arches supporting water mains. The date the cast iron was installed is not known. This bridge is listed on the National Register of Historic Places.

Project Information

The documentation of the Main Street Bridge was prepared by the Historic American Engineering Record (HAER), National Park Service, during the Summer of 1987, for the New York State Historic Bridges Recording Project. This project was sponsored by the New York State Department of Transportation and under the supervision of Eric DeLony, Chief & Principal Architect, HAER. This report was written by Andrew Cole, with research assistance from Charles Scott. When citing this report, please credit the Historic American Engineering

Record and the authors.

The first bridge to cross the Genesee River at this site was erected between 1810 and 1812 to open an east-west transportation line across northern New York State. Prior to the completion of this bridge, the only crossing of the Genesee River was at Avon, 20 miles to the south. The original bridge was a rough wooden structure placed on piers in the "shallow rapids," and cost about \$12,000 to construct. The completion of the bridge helped promote the growth of "Rochesterville" which was incorporated as the Village of Rochester in 1817. In that same year the "Great Freshet" of November seriously damaged the bridge and for the next six years the bridge required frequent repairs.

By 1822, local newspapers revealed that the need for a new bridge was widely acknowledged, and village officials appealed to the newly established County of Monroe for a new bridge. The county successfully petitioned the State of New York for \$14,000 for a new bridge, but a dispute between the county and the village over the responsibility for construction and maintenance delayed the construction of the bridge.

BUILDINGS ACROSS THE RIVER

As space along the shoreline became congested, businesses erected buildings across the river alongside of the bridge. By 1827 two structures had been erected. Rochester contributed to this development by establishing a farmers market on the bridge. By 1830, the greatest part of the north side of the bridge was lined by buildings. These buildings were supported by extensions of the bridge piers. Fires and floods periodically damaged both the bridge and buildings. In 1834 a fire destroyed a whole block of buildings, and in the following year a flood destroyed the west abutment and the buildings between the abutment and first bridge pier. A second major flood the following year again damaged the west side of the bridge and prompted public calls for the construction of a more substantial structure. The new bridge was envisioned as a substantial stone arch crossing, but after two stone piers and an eastern abutment were built, the effort was abandoned and the bridge was completed with timber.

THE STONE ARCH BRIDGE

By 1854 the deteriorated condition of the Main Street bridge had prompted renewed calls for a new bridge. This demand was supported by businessmen eager for a new bridge upon which to erect stores on the vacant south side. Agitation for a new bridge continued for the next two years until Monroe County appropriated \$20,000 for a Main Street Bridge. Several plans were developed before the City chose a plan for a five arch stone structure. On July 30, 1855 the city let a contract to Charles B. Coleman for \$44,475 for the bridge.

Construction began in September under the supervision of Kauffman and Bissel with University of Rochester Professor I. F. Quinby as consulting

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engineer. Shortly after construction began, work on the bridge was halted by a series of disputes, controversies, and court injunctions. Local millers, headed by Samuel P. Ely, obtained an injunction prohibiting construction because they alleged that the stone arches would restrict the flow of the river and produce increased flooding that would damage their property adjacent to the river. The injunction halted construction three weeks before being lifted.

In October a flood did sweep away most all of the bridge that had been constructed, a loss of about \$8,000. Work began again in the spring of 1856 with the excavation of the east abutment. The plan had called for enlarging and strengthening the existing abutment, built in 1824 by Elisha Johnson, but when it was found that the old abutment was not backed by stone, the contract plans and price had to be revised.

As work progressed during the summer and fall it became apparent that the bridge would not be completed by winter and Main Street would be closed for a second winter. To remedy this problem a temporary wooden bridge was built to provide access to the stores still straddling the river. The city required this bridge to be wide enough to accommodate teams and wagons.

On February 7 and 8, 1857, chunks of ice flowing downstream further damaged the stone arch bridge, heavily damaged the temporary pedestrian bridge, downed the horse and wagon bridge, and induced the collapse of all but three of the buildings built over the river.

The sequence of man-made delays and natural disasters produced a reorganization of the work in March 1857. Coleman resigned and the city council took control of the construction and appointed G. S. Copeland as superintendent of the bridge on March 17, 1857. Daniel Marsh and Professor Quinby replaced Kauffman and Bissel. All of this activity pushed the issue of the bridge into the center of public attention and it became a heated topic of conversation and debate. At council meetings, and in newspaper articles and letters to the editor, the debate raged as to whether the bridge should be built of stone or iron. Opinions were voiced that the stone bridge was too expensive and was taking too long to construct. Others suggested completing the stone piers and erecting a patented Whipple iron truss bridge atop them. In the meantime, bridge construction continued, and by the summer of 1857 the bridge neared completion. The keystone of the last arch was laid on July 29, 1857.

Almost as soon as the bridge was completed workmen began building extensions of the piers on the north side of the bridge upon which new stores could be erected. Owners of property on the south side of the bridge were not permitted to build until 1861.

The bridge received its first major test during the flood of 1865. Water reached the top of the bridge at the western end and undermined the Medina sandstone pavement and adjacent buildings. With the trusses supporting the buildings damaged, a number of buildings collapsed, but the bridge suffered little real damage.

In the wake of the flood both the city and the bridge received much blame. A committee investigating the flood concluded that the encroachment into the river by mills and buildings as well as the arches of the bridge itself had obstructed and restricted the river and magnified the severity of the flood. The bridge was labeled "a monument of errors."

The potential of the bridge to obstruct and restrict the flow of the Genesee River was reduced considerably in 1919 when the streambed beneath the arches was excavated and deepened to permit a greater volume of flow.

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